

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-15. Cancelled.

16. (New) An imaging system comprising:

an imaging device which outputs a plurality of digital signals each of which indicating an amount of light entered on a corresponding one of a plurality of pixels;

a first reducing device which reduces an amount of data of the plurality of the digital signals output by said imaging device;

a second reducing device which reduces an amount of data of the plurality of the digital signals output by said first reducing device;

a memory which stores digital signals;

a memory controller which writes the digital signals in said memory, and reads the digital signals from said memory;

a driver which drives said imaging device;

a function controller which controls a transfer of digital signals among said first reducing device, said second reducing device, and said memory through said memory controller; and

a mode setter which sets one of a first mode and a second mode to each of said driver and said function controller;

wherein said function controller transfers the plurality of the digital signals received from said first reducing device to said second reducing device, and transfers the plurality of the digital signals received from said second reducing device to said memory thorough said memory controller when the first mode is set by said mode

setter, while transfers the plurality of the digital signals received from said first reducing device to said memory through said memory controller, and transfers the plurality of the digital signals received from said memory through said memory controller to said second reducing device when the second mode is set by said mode setter.

17. (New) An imaging system comprising:

an imaging device which outputs a plurality of digital signals each of which indicating an amount of light entered on a corresponding one of a plurality of pixels;

a pre-processor which reduces an amount of data of the plurality of the digital signals output by said imaging device;

a memory which stores digital signals;

a memory controller which writes the plurality of the digital signals output by said pre-processor in said memory, and reads the plurality of the digital signals from said memory;

wherein the plurality of the pixels include a set of pixels each of which detecting light of a corresponding one of a plurality of color components;

said imaging device outputs the plurality of the digital signals each of which indicating an amount of light of the corresponding one of the plurality of the color components detected by each of the set of pixels;

said pre-processor comprises:

a first white balance adjuster adjusts a gain of a plurality of digital signals in correspondence to each of the plurality of the color components output by said imaging device, based on a predetermined gain in correspondence to each of the plurality of the color components;

a detector which detects a first average signal amount which indicates a first average value of a signal amount of the plurality of the digital signals in

correspondence to each of the plurality of the color components output by said first white adjuster;

a calculating device which calculates a first gain to be applied to the plurality of the digital signals in correspondence to each of the plurality of the color components so that the first average signal amounts in correspondence to the plurality of the color components are the same; and

a second white balance adjuster adjusts a gain of the plurality of the digital signals in correspondence to each of the plurality of the color components output by said first white balance adjuster, based on the first gain corresponding to each of the plurality of the color components calculated by said calculating device.

18. (New) The imaging system according to claim 17, wherein said pre-processor further comprises a gradation correcting device; and

said gradation correcting device converts the plurality of the digital signals to a plurality of converted digital signals each of which having a predetermined amount of information smaller than an amount of information of each of the plurality of the digital signals, by correcting gradation of the plurality of the digital signals.

19. (New) The imaging system according to claim 17, wherein said pre-processor further comprises a compression device which compresses a plurality of digital signals to reduce an amount of information of each of the plurality of the digital signals.

20. (New) An imaging system comprising:

an imaging device which outputs a plurality of digital signals each of which indicating an amount of light entered on a corresponding one of a plurality of pixels;

a pre-processor which reduces an amount of data of the plurality of the digital signals output by said imaging device;

a memory which stores digital signals; and

a memory controller which writes the plurality of the digital signals output by said pre-processor in said memory, and reads the plurality of the digital signals from said memory;

wherein said pre-processor comprises:

a thinning out device which outputs a first control signal a level of which changes at a constant cycle to said memory controller; and

an interpolation device which interpolates the plurality of the digital signals output by said imaging device;

said pre-processor outputs the first control signal and the plurality of the digital signals interpolated by said interpolation device to said memory controller together; and

said memory controller writes in said memory only a digital signal among the plurality of the digital signals interpolated by said interpolation device which the digital signal is input to said memory controller when the first control signal is at a predetermined level.

21. (New) The imaging system according to claim 20, further comprising:

a release button;

a second detector which outputs a status signal indicating whether said release button is pushed or not; and

a thinning out controller which controls start and stop of an operation of said thinning out device in accordance with the status signal.

22. (New) the imaging system according to claim 20, further comprising:

a processor which processes digital signals;

a mode switching device which outputs a mode signal indicating one of a first mode and a second mode; and

a mode control device which controls an operation of said memory controller in accordance with the mode signal;

wherein said processor includes a first compression device and a second compression device; and

said mode control device makes said memory controller output the digital signal to said first compression device which the digital signal is output by said memory when the mode signal indicates the first mode, while makes said memory controller output the digital signal to said second compression device which the digital signal is output by said memory when the mode signal indicates the second mode.

23. (New) The imaging system according to claim 20, further comprising:

a selector which selects the number of recording pixels to output a second control signal indicating the number of recording pixels selected thereby; and

a ratio controller which determines a ratio of thinning out the plurality of the digital signals in accordance with the second control signal output by said selector, and controls a change cycle of the level of the first control signal in accordance with the ratio.

24. (New) The imaging system according to claim 17, wherein said pre-processor further comprises a gain adjuster which adjusts a gain of the plurality of the digital signals input thereto;

said detector detects a second average signal amount which indicates a second average value of a signal amount of the plurality of the digital signals to be input to said gain adjuster;

said calculating device which calculates a second gain to be applied to the plurality of the digital signals to be input to said gain adjuster so that the second average value equals to a predetermined value; and

said gain adjuster adjusts a gain of the plurality of the digital signals input thereto, based on the second gain.

25. (New) An imaging system comprising:

an imaging device which outputs a plurality of digital signals each of which indicating an amount of light entered on a corresponding one of a plurality of pixels;

a pre-processor which reduces an amount of data of the plurality of the digital signals output by said imaging device;

a memory which stores digital signals; and

a memory controller which writes the plurality of the digital signals output by said pre-processor in said memory, and reads the plurality of the digital signals from said memory;

wherein said pre-processor comprises a compression device which compresses the plurality of the digital signals to reduce an amount of information of each of the plurality of the digital signals.

26. (New) The imaging system according to claim 25, wherein said compression device compresses the plurality of the digital signals into the plurality of the digital signals all having the same amount of information.